Sewage Advisory Committee DRAFT Minutes of the Meeting December 13, 2018

VOTING SEWAGE ADVISORY COMMITTEE (SAC) MEMBERS PRESENT

Lori Books, Pennsylvania State Association of Township Supervisors (Alternate)

Carl Cox, Pennsylvania State Association of Boroughs

Dr. Patrick Drohan, Pennsylvania State University

Keith Heigel, Pennsylvania Society of Land Surveyors

John Gigliotti, Pennsylvania Builders Association

Keith Klinger, Pennsylvania Landowner's Association

Jessica Shirley, Governor's Policy Office

Ginnie Anderson Kane, Pennsylvania State Association of Township Commissioners

Greg Marshall, Pennsylvania Onsite Wastewater Recycling Association

Mark Mills, Pennsylvania Association of Professional Soil Scientists

Duane Mowery, Chairman, Pennsylvania Water Environment Association

Susan Myerov, Pennsylvania Environmental Council

Eileen Nelson, Pennsylvania Society of Professional Engineers (via conference call)

Joseph Valentine, Pennsylvania Septage Management Association

John Wagman, American Society of Civil Engineers

Chris Wood, Vice-Chairman, Pennsylvania Association of Sewage Enforcement Officers

Robert T. Wood, Pennsylvania Association of Realtors

MEMBERS OF THE PUBLIC PRESENT

Meghan Andress, PreDoc, Inc.

Tom Ashton, American Manufacturing Company, Inc.

Oran Biel, Premier Tech

Lori Books, Pennsylvania State Association of Township Supervisors alternate

Adam B. Browning, Pennsylvania Onsite Wastewater Recycling Association (Alternate)

Mike Callahan, Soil Hub

Paul Cannon, Norweco

Larry Earney, Infiltrator

Mike Kaub, Expert Septic

Kathy Kronicz, Pennsylvania State Association of Township Supervisors

Chris Ramsey, Senator Lisa Baker's office

DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) STAFF PRESENT

Brian Chalfant, Policy Office

Bill Cumings, Attorney, Bureau of Regulatory Counsel

Annamaria Ether De Sanctis, Environmental Engineering Trainee, Planning Section, Division of Municipal Facilities (DMF), Bureau of Clean Water (BCW)
Lee McDonnell, Director, BCW
Jay Patel, Environmental Program Manager, DMF, BCW
Brian Schlauderaff, Environmental Group Manager, Planning Section, DMF, BCW
Janice Vollero, Water Program Specialist, Planning Section, DMF, BCW

CALL TO ORDER AND APPROVAL OF MINUTES

The meeting was called to order by Chairman Duane Mowery at 10:30 AM in the Conference Room of the Swatara Township Office Building, Dauphin County. A quorum was present.

Motion: Chairman Mowery called for a motion to approve the May 3, 2018 meeting minutes. Carl Cox made a motion to adopt the May 3rd, 2018, meeting minutes. Ginnie Anderson Kane seconded the motion, which was unanimously approved by the Committee.

ACTION ITEMS

1. The DEP and Chairman Mowery agreed to two (2) 2019 SAC meeting dates: March 13 and September 11. Both meetings are scheduled for 10:30 a.m. to 1:00 p.m. in Room 105 of the Rachel Carson State Office Building.

Motion: Chairman Mowery called for a motion to approve the 2019 SAC meeting dates. Vice-Chairman Chris Wood made a motion to adopt the 2019 SAC meeting dates. Robert Wood seconded the motion, which was unanimously approved by the Committee.

2. Chairman Mowery asked John Wagman to chair a nominating committee for the selection of officers for the 2019-2021 term. Mr. Wagman accepted the request and was thereby appointed by Chairman Mowery to chair the nominating committee.

DISCUSSION/INFORMATION ITEMS

Jay Patel explained that the comment period ended in May 2018, for the two (2) technical guidance documents, TVP and planning. DEP received approximately 300 comments and made changes to the documents based on those comments. Brian Schlauderaff explained that DEP has not made a decision on whether to finalize or redraft the TVP document; that decision will be made after the meeting. Mr. Schlauderaff further explained that due to the comments, the planning document is a brand-new document and will be published as draft for a 30-day comment period after the meeting. Lee McDonnell stated we will send SAC an email when it will be published in the Pa. Bulletin.

1. Changes to Technical Guidance Document *On-Lot Sewage Pretreatment Technology Verification Protocol (TVP)*

Brian Schlauderaff displayed the document on the screen with the track changes. Mr. Schlauderaff explained that the following significant changes were made to the document:

- Format was updated to improve readability.
- Definitions were moved from Appendix E to the front of the document.
- An additional section was added for acronyms.
- Introduction was updated for clarity.
- The limiting zone for repairs was changed from <12" to 8"-12"; now located in Appendix A3.
- The standards in Table A3 apply to existing lots created before Act 26.
- Clear language was added requiring certification and field testing to occur in climates similar to, or the same as, Pennsylvania's.
- The modified Tyler Table that was in Appendix G was replaced with a simpler version; removed the soil groups as a measure for level of pretreatment required and created a table based upon the Tyler Table (Appendix A2) using infiltration loading rates as one of the levels for pretreatment required instead.
- Table of Contents that was in Appendix E was removed.
- The monthly sampling requirement for field testing was changed to every two (2) months. This was based on a paper DEP researched by Tom Groves, and others, *Variability and Reliability of Test Center and Field Data*, that states it is better to increase the number of site locations rather than increase the number of samples. The document keeps 12 or more locations for field testing.
- The National Environmental Laboratory Accreditation Program (NELAP) was added as an acceptable certification for laboratories processing samples outside of PA.

Mr. Schlauderaff then proceeded to go through the document section by section.

- Page 1 formatting and word changes were made for better readability.
- Page 2 definitions were moved from the appendix to here and some additional ones were added.
 - o Dr. Patrick Drohan commented on the definition section:
 - Consider a definition for "climate"; use "similar precipitation" since precipitation is a main driver in these systems. However, we do not want to use precipitation patterns that are 50 years old.
 - Give more guidance on specific times to sample. He cautioned that if we use temperature in the definition we need to be careful; do we want to use temperature at a certain depth or an annual temperature and we should be aware that the temperature has changed fast over the past 10 years.
 - Consider a definition for "monthly sampling"; by stating over a 2-month period we risk losing wet and dry months over 60 days may be better.
 - Consider a legal definition for "confidence interval"

 Be specific on how long grab samples can be stored before they get to a lab.

Mr. Schlauderaff stated that minimum and maximum holding times are built into the test plan and all other suggestions will be considered.

- Page 4 updated the Introduction.
 - Chairman Mowery asked if we have a definition of "protective" as in "will be protective of the waters of the Commonwealth" and are we to assume that the systems already in use are "protective"? The Department responded that it comes from the Clean Streams Law, used in many of our documents and is qualitative, not quantitative.
- Page 6 minor changes were made to the Scope.
- Page 6 some deletions were made to the Roles and Responsibilities, no additions.

Greg Marshall inquired why we used "should" on page 10, Step Three, 1.a., as in "OATS should be designed" and we use "shall" in the performance standards? The Department explained that our legal department reviewed the language.

Mr. Schlauderaff skipped to the Performance Audit (page 11) as suggested by Chairman Mowery, to discuss the changes. (Note: only changes not mentioned previously are included below.)

- "Annual performance audit" was changed to "performance audit" to account for less than an annual audit.
- Added that a system must be running continuously for 60 days prior to sampling.
- Clarified 1 sample/parameter/year and not every month.
- Removed 80% pass/fail requirement and replaced it with action levels of 2 times the performance standard levels for pretreatment. Mr. Patel explained that DEP got rid of the 80% rule due to the variability in data and the systems already went through standardized testing.
- Removed much of the language regarding field testing.
- Explained when a corrective action plan (CAP) is expected.
- Added a five (5) year review of performance audit data to determine if the sampling frequency should be adjusted.
 - Dr. Patrick Drohan voiced concern that we may never have the sample size to have a statistically valid protocol. Mr. Schlauderaff explained that we also will use the test center and field testing data and invited Dr. Drohan to advise us of any suggestions he had to overcome this issue.
 - o Joe Valentine asked if we decided when during the year the sampling should occur? Mr. Schlauderaff stated that will be worked out with the manufacturer to cover wet and dry seasons.
 - Chairman Mowery voiced his concern with having agreements in place
 with property owners for sampling alternate systems and how this is a very
 big requirement for property owners who choose an alternate system over
 a conventional system. Other members voiced similar concerns about
 getting approval from the property owner. The Department explained that

these agreements must be in place; we need to know that the technology can be tested. However, if the property is sold and the new property owner refuses to grant permission to sample, we can be flexible and allow for another property to be tested.

- Added that all installations must be operated under valid operation and maintenance contracts.
- Added that there shall be a minimum of five (5) samples and a maximum of 10; this came from Canada.
- Clarified when maintenance can be performed prior to sampling 10 days prior.
 - Jay Patel explained that we need the performance audit to determine how these systems operate under real world conditions and the data collected will help move the alternates to conventional systems in the regs. Mark Mills voiced his concern that we have no such data collected from conventional systems.
- Added that the third party must notify the municipality if they observe sewage on the surface of the ground.
- Clarified that if you need to have a CAP for a system, that system will be included in the next round of samples.
- Clarified that if the data consistently shows that the technology does not meet the standard, we may suspend permitting of this technology until we work things out with the manufacturer and correct the issues.
- Appendix A1 had very few changes.
- Appendix A2 and A3:
 - o There was a discussion that there is no soil "type", "type" implies there is something else. Mr. Schlauderaff agreed to delete the word "type".
 - Mark Mills asked if the limiting zone is <12", is disinfection required? Mr. Schlauderaff answered yes. Mr. Mills asked what will happen to the existing technologies and if the existing technologies are still permittable? Mr. Schlauderaff explained that all current technologies will be evaluated and once the new approvals come out, you will follow those new rules then
 - O Joe Valentine stated that SAC previously recommended keeping the limiting zones at 10" and 16". DEP kept the 16" but not the 10", the 10" is now 12". Mr. Valentine reviewed this with the executive committee of PSMA and recommends that the limiting zone should be 12" for both a seasonal high water table and rock.
 - o Mr. Schlauderaff explained we are allowing repairs on <10" because we are trying to make the situation better, we don't want to limit innovativeness, if a technology works, why wouldn't we evaluate it. A discussion ensued about the 10", malfunctions and best technical guidance and when DEP must provide comment before the permit is issued.</p>

Appendix D

- Dr. Patrick Drohan suggested we define the variables in the statistical equations for the SEOs. Jay Patel responded that the document is meant for the manufacturers, not the SEOs.
- Appendix F

 There was much discussion on the "Modified Tyler" table, why we only included the infiltration rate and not the hydraulic loading rate and the fact the table is confusing as developed. Mr. Schlauderaff agreed to retitle the table.

Vice-Chairman Wood: If you have an existing property with a permit issued for a system on 10" but it is not built, and the permit is expiring and must be reissued, do we have to redesign the system on 12"? Mr. Schlauderaff: If you need a new permit, you have to meet the new standards.

Joe Valentine asked if DEP considered that you can't get a composite sample out of a zero tension lysimeter? Mr. Schlauderaff explained that we did and we will work with the manufacturer to come up with something similar; there are pan lysimeters. Dr. Patrick Drohan mentioned that they have several types of pan lysimeters in their lab and DEP is welcome to come look at them. The Department asked Dr. Drohan for his recommendation on what type of pan lysimeter should be used. Dr. Drohan will get back to us on a potential recommendation.

2. Changes to Technical Guidance Document Site Suitability and Alternatives Analysis Guidelines for New Land Development Proposing On-Lot Sewage Disposal

Jay Patel displayed the document on the screen and explained the changes made to the document:

- Eliminated the term "marginal condition"; sites are now suitable or unsuitable.
 - Keith Klingler stated that "marginal conditions" are not interpreted consistently amongst DEP staff.
- Changed the formatting.
- Added an acronym section.
 - o Mark Mills pointed out that the definition of "shallow limiting zone" should read ">16 inches" instead of "located within 16 inches".
 - Dr. Patrick Drohan pointed out that the definition of "sinkhole" is not correct; it should relate to karst and not just holes where tree trunks were excavated.
- Added a Scope.
- Introduced two (2) paths to meet general site suitability. The amendment to the Act does not repeal or replace any existing laws or regulations so the DEP had to read the amendment within the context of all the existing requirements. There is regulatory site suitability (§ 71.62) and statutory site suitability (Jay Patel read the amendment.) Statutory site suitability speaks to permitting is the system permittable on a site. It comes into play on sites with limiting zones <20" and/or when a perc test is not performed or if the perc test <3 mpi or >180 mpi. Statutory site suitability requires lot-by-lot testing and a Component 2 planning module.
- Eliminated the sewage management section to focus only on planning; a sewage management technical guidance document will be developed in the near future.

Jay Patel went over the five (5) planning scenarios that were provided to the SAC members.

The following questions were asked:

- Vice-Chairman Wood: If someone wants to put in an alternate system instead of a sand mound, must they test for a sand mound first?
 Mr. Patel: No; you can choose the statutory site suitability path and do lot-by-lot testing.
- Mark Mills: When you open up the regs, will you take out general site suitability? Mr. Patel: When we open the regs we will have only one (1) path for site suitability.
- Vice-Chairman Wood: Before, if we found soils of <20", we had to deny the permit. Now, do we still have to deny the permit if <20" and reissue one with <20"?

Mr. Patel: No.

- Chairman Mowery: Are you anticipating that conventional systems will need additional O&M like the alternates are being subjected to?
 Mr. Schlauderaff: That is how we wrote it for all systems, if there is no sewage management program, you will need O&M for the life of the system or replacement sites.
- Robert Wood: Replacement sites satisfies O&M for the life of the system? Mr. Schlauderaff: Yes, a protected replacement site.
- Mark Mills: Page 5 reads "During the permitting process, an SEO must test each lot...". This is now mainly done at planning, so there is a need to reword this. Vice-Chairman Wood: Can change it to read "if the SEO deems necessary."
- Chairman Mowery: Can you switch systems at the permitting stage?

 Mr. Patel: If you can permit another system on that site using the OAT approval document, permit it. You do not have to go through planning. If you can't permit it, you must go back through planning. Keep that in mind when selecting your systems.
- Keith Klingler: Can systems between 12" and 20" be designed by an SEO without a soil scientist?
 - Mr. Patel: Depends on the listing.
 - Joe Valentine: There is no requirement for soil scientists to design systems.
- There was a discussion on when hydrostudies and permeability studies are necessary. The Department clarified that the hydrostudy and permeability requirements are directly from the regs and this document was not changing anything in regards to those requirements.

Chairman Mowery asked if the group saw a need to form a subcommittee to provide comments on this document from SAC or just comment on it individually. The consensus was that no subcommittee was needed.

3. Changes to Technical Guidance Document Sewage Enforcement Officer Certification and Training Program Guidance

This document will be published for public comment. Brian Schlauderaff explained the changes made to the document:

- Added information on the learning management system that DEP purchased, called the Clean Water Academy. It is one-stop shopping for SEOs.
- Certification cycles will go to 2-year rolling certification cycles. This is not effective until the guidance is final.
- Roll-over credits are being phased out. Seven (7) credits will go to three (3) than zero (0) by 6/30/2022. We allowed roll-over credits due to the limitation on the small number of courses with small amount of credits. The learning management system will help with this. When the Clean Water Academy goes live, DEP will send out an All SEO Letter advising SEOs to register on it. Hoping to go live the beginning of 2019 although some things will have to wait until this technical guidance goes final.
- Prior to 2010, there was a mandatory soils course. This document reinstates that a mandatory soils course must be taken prior to taking the SEO certification exam. All existing SEOs that did not successfully complete the old mandatory soils course, will have five (5) years to take one. DEP contracted with Soil Hub to offer a mandatory soils course which includes on-line content and field study. DEP is offering a one-time subsidy subsidizing \$250 for each of the first 100 students that take it.

Jay Patel announced that we will have a booth at the PSMA conference and a one-hour presentation at the PASEO conference on the Clean Water Academy.

The following questions and comments were made:

- Dr. Patrick Drohan: Have you considered 10 one (1) hour sessions across the state as a preparation lecture to the soils course? We write the national soils exam and we do something similar.
 - Mike Callahan (Soil Hub): the course will have a three (3) to four (4) hour on-line portion up front.
- Vice-Chairman Wood: Will we see our older training on the Clean Water Academy?
 - Janice Vollero: Yes, and you will be able to print your training report.
- Vice-Chairman Wood: Are the lists of sponsors and approved courses on the DEP website up-to-date?
 - Ms. Vollero: Yes, for the most part.
- Joe Valentine: The document should not allow SEOs to repeat courses just for credit. Without that stipulation, some SEOs will take the cheapest courses and not more valuable ones because they are more expensive.
 - Brian Schlauderaff: We don't have enough of a library of courses to require that. However, if we require a minimum price per credit, it would level the playing field. That is a change to occur in a different technical guidance document.

- Mr. Valentine: Have you considered allowing SEOs with a certain amount of credits in soils to opt out of the mandatory soils course? That might entice others who had soils courses to enter the program.
 - Dr. Drohan: For the national soils test they looked at either grandfathering everyone once or making everyone go through it once.
 - Mr. Schlauderaff: Maybe an option would be to not take the course but just the test
- Greg Marshall: Who is in charge of the learning management system? Jay Patel: Jay Braund or contact any of us.

Chairman Mowery asked if the group saw a need to form a subcommittee to further review this document. The consensus was that no subcommittee was needed.

4. Discussion and information on PAG-04 *General Permit for Small Flows Treatment Facility*

PAG-04 is a general permit for small flow treatment facilities (SFTF) that have a discharge of <2000 gpd. There are about 2500 SFTFs operating under a PAG-04 and they are expiring 5/11/19. The reason the PAG-04 is being discussed at this meeting is that some of technologies used for SFTFs are the same as the alternate system technologies for on-lot systems. Jay Patel explained the following changes being made to the PAG-04:

- The Notice of Intent fee is increasing. For single residential SFTF, the fee is increasing from \$0 to \$100; for all other SFTFs, the fee is increasing from \$100 to \$200.
- A definition of service provider is being added. A service provider is one that inspects SFTFs and will be certified by the manufacturer. The only way a permittee can be a service provider is if they are a certified wastewater operator.
 - Chairman Mowery suggested that "authorized by the manufacturer" might be a better term because "certified" implies liability by the manufacturer for work that the certified operator does.
 - Greg Marshall asked how maintenance for non-proprietary systems will be handled since there is no manufacturer?
 Mr. Patel answered that there are existing requirements and he could get Mr. Marshall that information.
- Only facilities in the technical guidance document *Small Flow Treatment Facilities Manual* were eligible for coverage under the PAG-04. Now any alternate system that meets the advanced treatment standard in the TVP guidance and has inclusion of disinfection to 200 MPN/100 ml can be used.
- Maintenance reports will be for a calendar year as opposed to June 1 to May 31 of the following year.
- Removal of solids from the dosing and aerobic tanks will be as needed instead of annually.
- Changing the effluent TRC range of 0.3 0.5 ppm from required to recommended and changing UV maintenance from monthly to as needed when the alarm is present.

• All general permits will be adding a statement that if any parameter in the discharge will cause stream impairment, you will not be able to get coverage under the general permit.

Greg Marshall asked if the new PAG-04 will be out in May. Lee McDonnell explained that the PAG-04 is an NPDES permit covered by EPA so if we get to a point where we haven't reissued the permit, we can extend it, but only to those who are already covered under the PAG-04 now, no one new. Mr. Marshall asked what would happen if the TVP guidance was not finalized by May and Mr. Patel explained that some wording would need to be changed.

Vice-Chairman Wood thanked the Department for considering SAC's opinions, using them and making much better documents.

Keith Klingler mentioned that he is being told that all existing and proposed water supplies must be sited on the map and asked where that was in the regs? Why isn't it good enough to circle the absorption area site with the isolation distance or put a note on the map? Mr. Patel said we want to see them but would have to look at the regs for where that is stated.

PUBLIC COMMENT

Adam Browning asked how additional permeability testing affects planning and permitting. Joe Valentine answered that it affects the size of the system; the system is sized based on the most restrictive value – either the permeability testing value or the percolation testing value.

NEXT MEETING

The next meeting of the Sewage Advisory Committee is planned for Wednesday, March 13, 2019, at 10:30 AM in Room 105 of the Rachel Carson State Office Building.

ADJOURN

Motion: Chairman Mowery called for a motion to adjourn the meeting. John Gigliotti made a motion to adjourn the meeting. John Wagman seconded the motion which was unanimously approved by the Committee. The December 13, 2018, SAC meeting was adjourned at 1:16 PM.